

ABSTRACT OF THE DISCLOSURE

A semiconductor integrated circuit includes a local memory permitting high-speed access. The local memory has at least first and second ports. The first port of the local memory is connected to a CPU by a first bus and the second port of the local memory is connected to an access control unit by a second bus. An external device is connected to the access control unit. When the CPU and/or the external device accesses the local memory, the CPU sends a control signal and data to the first port (CPU-access port) of the local memory via the first bus, and the access control unit sends another control signal and data to the second port (external-device-access port) of the local memory via the second bus. The local memory then executes data writing or reading based on the control signal(s) and data thus introduced to the access port(s). The external device can access the local memory via the access control unit to transfer data at high speed to and from the local memory.